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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/749,857

12/30/2003

Tim Allen

ALTRP108

6310

51501

7590

06/07/2006

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EXAMINER

CAO, CHUN

ART UNIT

PAPER NUMBER

2115

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Applicati n No.	Applicant(s)	
	10/749,857	ALLEN, TIM	
	Examin r	Art Unit	
	Chun Cao	2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/18/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-28 are presented for examination.
2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The current title is imprecise.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-28 rejected under 35 U.S.C. 102(b) as being anticipated by Inaba et al. (Inaba), U.S. patent no. 4,396,987.

As per claim 1, Inaba discloses a system on a programmable chip [fig. 3], the system comprising:

memory [col. 3, lines 13-16; col. 4, lines 17-22]; a processor [col. 4, lines 22-23] couple to memory on the programmable chip, the processor operable to write streaming output information to memory [fig. 3; col. 4, lines 22-26];

a streaming output peripheral configured to generate clock cycle accurate output signals [pulses Xp and Zp; col. 4, lines 27-35], wherein the clock cycle accurate output signals are generated by reading streaming output information from memory and outputting signals based on the streaming output information [col. 3, lines 42-47; col. 5, lines 33-50].

As per claim 2, Inaba discloses the memory, processor, and streaming output peripheral are connected to a simultaneous multiple primary component fabric [fig. 3; col. 4, lines 17-30].

As per claim 3, Inaba discloses streaming output information includes amplitude and timing information [col. 4, lines 27-37; col. 5, lines 33-50; col. 6, lines 29-35].

As per claim 4, Inaba discloses the streaming output information comprises a sequence of values written to memory [col. 5, lines 33-50].

As per claim 5, Inaba inherently discloses the sequence of values is associated with a periodic waveform [col. 5, lines 33-50].

As per claim 6, Inaba inherently discloses the sequence of values is associated with an event driven waveform [col. 4, lines 27-37; col. 5, lines 33-50; col. 6, lines 29-35].

As per claim 7, Inaba inherently discloses the sequence of values is associated with a scripted waveform [col. 4, lines 27-37; col. 5, lines 33-50; col. 6, lines 29-35].

As per claim 8, Inaba discloses the streaming output peripheral operates as a streaming parallel output [fig. 3; col. 4, lines 27-46].

As per claim 9, Inaba inherently discloses the streaming output peripheral operates as a digital to analog converter (DAC) [col. 5, lines 33-50].

As per claim 10, Inaba discloses the streaming output peripheral operates as a pulse width modulator [col. 9, lines 21-40].

As per claim 11, Inaba inherently discloses the clock cycle accurate output values are generated during expected clock cycles [col. 4, lines 27-35].

As per claim 12, Inaba inherently discloses the clock cycle accurate output values form clock cycle accurate waveforms [col. 4, lines 27-35].

As per claim 13, Inaba discloses the clock cycle accurate waveform is generated without intervention from the processor [col. 6, lines 29-50].

As per claim 14, Inaba discloses the streaming output peripheral receives address information from the processor indicating where to read streaming output information [col. 5, lines 35-50].

As per claim 15, Inaba discloses the address information comprises one or more memory addresses [col. 5, lines 35-50; col. 6, lines 29-50].

As per claim 16, Inaba discloses the memory, processor, and streaming output peripheral are connected using simultaneous multiple primary component fabric [fig. 3; col. 4, lines 17-30].

As to claims 17-23, Claims 1-16 basically are the corresponding elements that are carried out the method of operating steps in claims 17-23. Accordingly, claims 17-23 are rejected for the same reason as set forth in claims 1-16.

As per claims 24-28 are written in mean plus function and contained the same limitations as claims 1-16. Therefore, same rejection is applied.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun Cao whose telephone number is 571-272-3664. The examiner can normally be reached on Monday-Friday from 7:30 am-4:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 2, 2006



CHUN CAO
PRIMARY EXAMINER